

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C07C 65/30, 51/373, 45/40, 47/27, 47/02, C09J 191/00, C08L 61/06		A1	(11) International Publication Number: WO 00/31015 (43) International Publication Date: 2 June 2000 (02.06.00)
(21) International Application Number: PCT/GB99/03913 (22) International Filing Date: 25 November 1999 (25.11.99) (30) Priority Data: 9825679.5 25 November 1998 (25.11.98) GB 9914108.7 18 June 1999 (18.06.99) GB (71) Applicants (for all designated States except US): E.I. DU PONT DE NEMOURS AND COMPANY [US/US]; 1007 Market Street, Wilmington, DE 19898 (US). THE UNIVERSITY OF WALES, BANGOR [GB/GB]; The Biocomposites Centre, Bangor, Gwynedd LL57 2UW (GB). (72) Inventors; and (75) Inventors/Applicants (for US only): KHAN, Mohammed, Lokman [BD/GB]; 9 Lon y Bedw, Foxlands, Bangor, Gwynedd LL57 4TN (GB). TOMKINSON, Jeremy [GB/GB]; Tan y Graig, Siloh, Gwynedd LL56 4JR (GB). SALISBURY, Richard, James [GB/GB]; Berth Lwyd, Tyn y Gongl, Anglesey LL74 8NS (GB). (74) Agents: HUTCHINS, Michael, Richard et al.; Fry Heath & Spence, The Old College, 53 High Street, Horley, Surrey RH6 7BN (GB).			(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: METHOD OF MODIFYING COMPONENTS PRESENT IN CASHEW NUT SHELL LIQUID			
(57) Abstract <p>The invention provides a process for modifying CNSL comprising subjecting the CNSL to ozonolysis to form ozonolysis reaction products followed by reduction of the ozonolysis reaction products to give a mixture of phenolic components and aldehydes. In a preferred embodiment, the invention provides a process for modifying CNSL which comprises the steps of first reacting CNSL with ozone to form a mixture containing ozonolysis reaction products, and secondly treating the mixture under reducing conditions to form a further mixture containing phenolic components with an eight carbon chain having a terminal CHO group and alkyl components of varying lengths with either one or two terminal CHO groups. The resulting CNSL aldehydes can be used to form adhesives for use in the manufacture of composites such as wood particle board.</p>			

T O M K I N S O N